

## **Australian Bureau of Statistics**

### 6206.0 - Labour Force Experience, Australia, Feb 2005

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# **Summary**

### **Main Features**

#### **ABOUT THIS PUBLICATION**

This publication presents information about the labour force experience of the civilian population aged 15-69 years during the 12 months ending February 2005. It presents information about time spent in labour force activities, including episodes of working or looking for work, and time spent out of the labour force.

For this publication, labour force activity over a 12-month period was determined from a more limited set of questions than is used in the monthly Labour Force Survey (LFS). For this reason, the terms **worked** and **looked for work** are used, rather than the more precisely defined terms **employed** and **unemployed**, as used in the LFS.

#### **ABOUT THIS SURVEY**

Statistics in this publication were obtained from the Labour Force Experience survey conducted throughout Australia in February 2005 as a supplement to the Australian Bureau of Statistics (ABS) monthly LFS.

Labour force experience relates to a person's labour force activities over a 12-month period. Labour force activity consists of either working or looking for work.

This survey measured the number of weeks people were engaged in these labour force activities during the year, the number of spells of looking for work during the year and the main activity of people when not in the labour force.

#### **NOTES ABOUT THE ESTIMATES**

The data items 'Level of highest educational attainment', 'Level of highest non-school qualification', 'Highest year of school completed' and 'State or territory of usual residence 12 months ago' included in the 2003 publication have been omitted from this publication as this information was not collected in the 2005 survey. Information on educational qualifications, cross classified by labour force status, can be obtained from the survey of Education and Work, which is conducted in May each year as a supplement to the ABS monthly LFS.

#### **ROUNDING**

As estimates have been rounded, discrepancies may occur between sums of the component items and totals.

#### **INQUIRIES**

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070 or Labour Market Section on Canberra (02) 6252 7206.

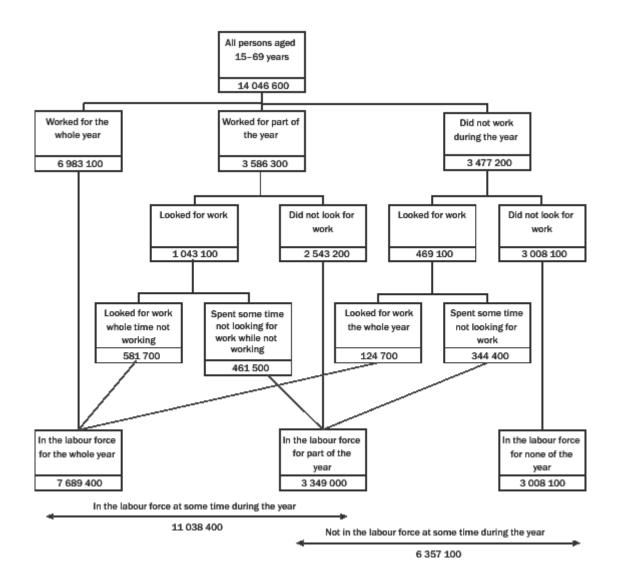
#### **CONCEPTUAL FRAMEWORK**

#### **CONCEPTUAL FRAMEWORK**

The following diagram illustrates the conceptual framework for the Labour Force Experience survey. People aged 15-69 years were classified according to their labour force activity over a 12-month period, that is, whether they were working or looking for work.

The framework firstly differentiates between people who worked the whole year, part of the year or did not work during the year. People who worked part of the year or did not work during the year were asked whether they looked for work during the year. People who looked for work were also asked about the time they spent looking for work.

Note that the terms **worked** and **looked for work** are not the same as the more precisely defined terms **employed** and **unemployed**, which are used in the monthly Labour Force Survey to describe current labour force status. See the Glossary for the definitions of these terms.



#### **SUMMARY OF FINDINGS**

#### **ALL PEOPLE AGED 15 TO 69 YEARS**

In February 2005, the Australian civilian population aged 15-69 years comprised 14,046,600 people (excluding institutionalised people, boarding school pupils and people in very remote parts of Australia). During the 12 months to February 2005, 72% of these people did not change their labour force status. Of those, 69% worked for the whole year, 30% were not in the labour force for the whole year and 1% looked for work for the whole year.

During the year ending February 2005:

- 10,569,400 people worked at some time during the year, of whom 6,983,100 spent the whole year working
- 1,512,200 people looked for work at some time during the year, of whom 124,700 spent the whole year looking for work
- 6,357,100 people were not in the labour force at some time during the year, of whom 3,008,100 spent no time in the labour force.

#### Participation in the labour force

There were 11,038,400 people aged 15-69 years in the labour force at some time during the year ending February 2005. That is, 79% of Australians aged 15-69 years either worked or looked for work at some time during the year. This proportion has risen from 77% in 1995.

Of males aged 15-69 years, 85% participated in the labour force at some time in the 12 months to February 2005. This figure has remained relatively steady since 1995. For females, the proportion participating has steadily increased from 69% in 1999 to 73% in 2005.

By age group, the highest participation in the labour force at some time during the year ending February 2005 was for people aged 20-24 years (90%). Labour force participation dropped to 69% for people aged 55-59 years and then to 48% for people aged 60-64 years. Only 20% of people aged 65-69 years participated in the labour force at some time during the year. Males participated at higher rates than females in all age groups except for people aged 15-19 years in which females participated at a slightly higher rate (74%) than males (72%).

Of the people who were in the labour force at some time during the year, 70% spent the whole year in the labour force and 17% spent 39 to 51 weeks in the labour force.

#### PEOPLE WHO WORKED AT SOME TIME DURING THE YEAR

There were 10,569,400 people aged 15-69 years who worked at some time during the year ending February 2005. Of these, 5,700,700 (54%) were male and 4,868,700 (46%) were female. Some 70% of these males worked for the entire 52 weeks, compared to 61% of females.

The proportion of males who worked at some time during the year (82%) has remained relatively stable since 1995. The proportion of females who worked at some time during the year has steadily risen throughout that period from 63% in 1995 to 69% in 2005.

Of those people who worked at some time during the year ending February 2005:

- 65% worked full-time only (79% of males and 49% of females)
- 25% worked part-time only (13% of males and 39% of females)
- 10% worked a combination of full-time and part-time (9% of males and 12% of females)

Over three-quarters (79%) of people who worked full-time only worked for the whole year, compared to 40% of people who worked part-time only.

The majority of people who worked at some time during the year ending February 2005 had only one employer or business during that time (77%). One quarter (25%) of people who worked part-time only had two or more employers or businesses during the year, compared to 18% of people who worked full-time only.

#### PEOPLE WHO LOOKED FOR WORK AT SOME TIME DURING THE YEAR

During the year ending February 2005, 782,000 males and 730,200 females aged 15-69 years spent some time looking for work.

The proportion of males who looked for work at some time during the year has steadily decreased, from 18% in 1995 to 11% in February 2005. Similarly, the proportion of females has decreased from 14% in 1995 to 10% for the 12 months ending February 2005.

Of the 1,512,200 people who looked for work at some time during the year ending February 2005:

- 20% looked for work for between 1 and 3 weeks
- 37% looked for work for between 4 and 12 weeks
- 16% looked for work for between 13 and 25 weeks
- 27% looked for work for between 26 and 52 weeks, including 8% who looked for the whole year.

The mean (average) duration of time spent looking for work was 16.7 weeks. On average, females who looked for work spent less time (15.4 weeks) than males (18 weeks). By age group, people aged 55-69 years spent the most time on average looking for work (23.4 weeks), while people aged 15-19 years spent the least time on average (14.1 weeks).

Two-thirds (69%) of people looking for work during the year had also worked during the year.

# PEOPLE WHO WERE NOT IN THE LABOUR FORCE AT SOME TIME DURING THE YEAR

There were 6,357,100 people aged 15-69 years who were not in the labour force at some time during the year ending February 2005. Of these, 2,562,400 (40%) were male and 3,794,800 (60%) were female. Almost half (47%) of the people in this group spent no time in the labour force during the year.

The main activities while not in the labour force most commonly reported by males were 'holiday, travel or leisure activities' (27%), 'attended an educational institution' (24%), and 'retired or voluntarily inactive' (19%). For females, the most commonly reported main activities were 'home duties or child care' (46%), 'attended an educational institution' (16%), and 'holiday, travel or leisure activities' (15%).

### **About this Release**

#### **ABOUT THIS RELEASE**

Provides information on the labour force experience of persons aged 15-69 during the year

prior to the survey. Labour force experience can be described in terms of labour force activities undertaken by persons in a 12-month period, namely working and looking for work. Details include the number of weeks spent working, looking for work, or out of the labour force during the year. Estimates can be cross-classified by labour force demographics such as state, sex, age and marital status and birthplace.

# **Explanatory Notes**

## **Explanatory Notes**

#### INTRODUCTION

- 1 The statistics in this publication were compiled from data collected in the Labour Force Experience survey (LFE) that was conducted throughout Australia in February 2005 as a supplement to the Australian Bureau of Statistics (ABS) monthly Labour Force Survey (LFS). Respondents to the LFS who were in scope of the supplementary survey were asked further questions.
- **2** The publication **Labour Force**, **Australia** (cat. no. 6202.0) contains information about survey design, sample redesign, scope, coverage and population benchmarks relevant to the monthly LFS, which also apply to supplementary surveys. It also contains definitions of demographic and labour force characteristics, and information about telephone interviewing which are relevant to both the monthly LFS and supplementary surveys.
- **3** From April 2001, the LFS has been conducted using a redesigned questionnaire containing additional questions and some minor definitional changes. These changes also affect the supplementary surveys. For further details, see **Information Paper: Implementing the Redesigned Labour Force Survey Questionnaire** (cat. no. 6295.0) and **Information Paper: Questionnaires Used in the Labour Force Survey** (cat. no. 6232.0).

#### **CAI IMPLEMENTATION**

- **4** Information for this survey was collected using computer assisted interviewing (CAI), whereby responses are recorded directly onto an electronic questionnaire in a notebook computer.
- **5** The change of interviewing procedure since the 2003 survey, which was conducted using the 'pen and paper' method, is not expected to have affected the estimates in any meaningful way.

**6** The conceptual framework used in Australia's LFS aligns closely with the standards and guidelines set out in Resolutions of the International Conference of Labour Statisticians. Descriptions of the underlying concepts and structure of Australia's labour force statistics, and the sources and methods used in compiling these estimates, are presented in **Labour Statistics: Concepts, Sources and Methods** (cat. no. 6102.0.55.001) which is available on the ABS web site <a href="https://www.abs.gov.au">https://www.abs.gov.au</a> (Methods, Classifications, Concepts & Standards).

#### SCOPE

**7** The scope of the LFS is restricted to people aged 15 years and over and excludes the following people:

- members of the permanent defence forces
- certain diplomatic personnel of overseas governments, customarily excluded from census and estimated populations
- overseas residents in Australia
- members of non-Australian defence forces (and their dependants).
- **8** Students at boarding schools, patients in hospitals, residents of homes (e.g. retirement homes, homes for people with disabilities), and inmates of prisons are excluded from all supplementary surveys.
- **9** This supplementary survey was conducted in both urban and rural areas in all states and territories, but excluded approximately 120,000 people living in very remote parts of Australia who would otherwise have been within the scope of the survey. The exclusion of these people will have only a minor impact on any aggregate estimates that are produced for individual states and territories, except the Northern Territory where such people account for over 20% of the population.

**10** In addition to those already excluded from the LFS, people aged 70 years and over and visitors to private dwellings are excluded from this survey.

#### **COVERAGE**

**11** The estimates in this publication relate to people covered by the survey in February 2005. In the LFS, coverage rules are applied which aim to ensure that each person is associated with only one dwelling and hence has only one chance of selection in the survey. See **Labour Force**, **Australia** (cat. no. 6202.0) for more details.

#### **SAMPLE SIZE**

**12** Supplementary surveys are not always conducted on the full LFS sample. Since August 1994 the sample for supplementary surveys has been restricted to no more than seveneighths of the LFS sample.

13 The initial sample for the February 2005 LFS consisted of 40,967 private dwelling households and special dwelling units. Of the 33,339 private dwelling households and special dwelling units that remained in the survey after sample loss (e.g. households selected in the survey which had no residents in scope for the LFS, vacant or derelict dwellings and dwellings under construction), approximately 31,250 or 93.7% were fully responding to the Labour Force Experience survey. The number of completed interviews obtained from these private dwelling households and special dwelling units (after taking into account scope, coverage and subsampling exclusions) was 46,292.

#### **RELIABILITY OF THE ESTIMATES**

**14** Estimates in this publication are subject to sampling and non-sampling errors:

- Sampling error is the difference between the published estimate and the value that would have been produced if all dwellings had been included in the survey. For more information see the Technical Note.
- Non-sampling errors are inaccuracies that occur because of imperfections in reporting by respondents and interviewers and errors made in coding and processing data. These inaccuracies may occur in any enumeration, whether it be a full count or a sample. Every effort is made to reduce the non-sampling error to a minimum by careful design of questionnaires, intensive training and supervision of interviewers and efficient processing procedures.

#### **SEASONAL FACTORS**

**15** The estimates are based on information collected in the survey month, and, due to seasonal factors, may not be representative of other months of the year.

#### **CLASSIFICATIONS USED**

16 Occupation data are classified according to the ASCO - Australian Standard Classification of Occupations, Second Edition, 1997 (cat. no. 1220.0).

17 Industry data are classified according to the Australian and New Zealand Standard Industrial Classification (ANZSIC), 1993 (cat. no. 1292.0).

**18** Country of birth data are classified according to the **Standard Australian Classification of Countries (SACC), 1998** (cat. no. 1269.0).

#### **NOTES ON ESTIMATES**

**19** The data items 'Level of highest educational attainment', 'Level of highest non-school qualification', 'Highest year of school completed' and 'State or territory of usual residence 12 months ago' included in the 2003 publication have been omitted from this publication, as this

information was not collected in the 2005 survey. Information on educational qualifications, cross classified by labour force status, can be obtained from the survey of Education and Work, which is conducted in May each year as a supplement to the ABS monthly LFS.

#### **COMPARABILITY OF TIME SERIES**

**20** From 2003, the data item 'number of employers/businesses during the year' has been derived differently from previous surveys. Prior to 2003, where they could be identified, multiple jobs of multiple job-holders were excluded from this data item. From 2003, all employers/businesses held by all persons are now included.

**21** Revisions are made to population benchmarks for the LFS after each five-yearly Census of Population and Housing. The last such revision was made in February 2004 to take account of the results of the 2001 Census of Population and Housing. Estimates from supplementary surveys conducted from and including February 2004 are therefore based on revised population benchmarks.

#### **COMPARABILITY WITH MONTHLY LFS STATISTICS**

**22** Due to differences in the scope and sample size of this supplementary survey and that of the LFS, the estimation procedure may lead to some small variations between labour force estimates from this survey and those from the LFS.

#### **PREVIOUS SURVEYS**

23 Results of similar surveys, conducted in February 1969, 1973, 1975, 1976, 1977, annually from February 1979 to February 1989, annually from March 1990 to March 1994, and in February 1995, 1997, 1999, 2001 and 2003 have been given in previous issues of the publication Labour Force Experience, Australia (cat. no. 6206.0) and the Standard Data Service Labour Force Experience on Hardcopy, Australia (cat. no. 6206.0.40.001).

#### **NEXT SURVEY**

**24** The ABS plans to conduct this survey again in February 2007.

#### **ACKNOWLEDGMENT**

**25** ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated: without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the **Census and Statistics Act 1905**.

#### **RELATED PUBLICATIONS**

**26** Other ABS publications which may be of interest include:

- Career Experience, Australia, cat. no. 6254.0
- Job Search Experience, Australia, cat. no. 6222.0
- Labour Force, Australia, cat. no. 6202.0
- Labour Mobility, Australia, cat. no. 6209.9
- Labour Statistics: Concepts, Sources and Methods, 2001, cat. no. 6102.0
- Persons Not in the Labour Force, Australia, cat. no. 6220.0
- Australian Labour Market Statistics, cat. no. 6105.0.

**27** Current publications and other products released by the ABS are listed in the **Catalogue of Publications and Products** (cat. no. 1101.0). The Catalogue is available from any ABS office or the ABS web site <a href="https://www.abs.gov.au">https://www.abs.gov.au</a>. The ABS also issues a daily Release Advice on the web site which details products to be released in the week ahead.

## **Glossary**

### **Employed**

People aged 15 and over who, during the reference week:

- worked for one hour or more for pay, profit, commission or payment in kind, in a job or business or on a farm (comprising employees, employers and own account workers);
- worked for one hour or more without pay in a family business or on a farm (i.e. contributing family workers); or
- were employees who had a job but were not at work and were:
  - away from work for less than four weeks up to the end of the reference week; or
  - away from work for more than four weeks up to the end of the reference week and received pay for some or all of the four week period to the end of the reference week; or
  - away from work as a standard work or shift arrangement; or
  - on strike or locked out: or
  - on workers' compensation and expected to return to their job; or
- were employers or own account workers who had a job, business or farm, but were not at work.

#### **Industry**

Classified according to the **Australian and New Zealand Standard Industrial Classification (ANZSIC), 1993** (cat. no. 1292.0). In this publication, industry relates to the main job and is shown at the ANZSIC Division level.

In the labour force at some time during the year

People who had worked or looked for work for one week or more during the year.

#### In the labour force for the whole year

People who had either worked or looked for work every week for the whole year.

#### In the labour force for part of the year

People who had either worked or looked for work for one week or more during the year, but had some weeks when neither activity was undertaken.

#### Looked for work at some time during the year

People who looked for work for one week or more during the year.

#### Main English-speaking countries

Comprises the United Kingdom, Ireland, Canada, South Africa, the United States of America and New Zealand.

#### Mean duration of time spent looking for work

Obtained by dividing the aggregate number of weeks a group has been looking for work by the number of people in that group.

#### Median duration of time spent looking for work

The duration which divides people who looked for work into two equal groups, one comprising people whose time spent looking for work during the year is above the median, and the other, people whose time spent looking is below it.

#### Not in the labour force at some time during the year

People who had neither worked nor looked for work for one week or more during the year.

#### Number of employers/businesses during the year

The number of employers/businesses a person worked for during they year.

#### Number of spells of looking for work during the year

The number of different periods, including the current period, during which a person was not working but was looking for a job.

#### Occupation

Classified according to **ASCO - Australian Standard Classification of Occupations**, **Second Edition** (cat. no. 1220.0). In this publication, occupation relates to the main job and is shown at the Major Group level.

#### Time in the labour force during the year

The total number of weeks a person reported as having either worked or looked for work.

#### Time not in the labour force during the year

The total number of weeks a person reported as having neither worked nor looked for work.

#### Time spent looking for work during the year

The total number of weeks a person spent looking for work, while not working.

#### Time worked during the year

The total number of weeks a person reported as having either worked or been on paid leave. Periods of one week or more on strike or time off without pay are not classified as time worked.

#### Time worked full time during the year

The total number of weeks a person reported as having either worked or been on paid leave during the year, minus any weeks during the year where they reported working part time.

#### Time worked part time during the year

The response given by a respondent to the question 'For how many weeks did you work part time?'.

#### Unemployed

People aged 15 years and over who were not employed during the reference week, and:

- had actively looked for full time or part time work at any time in the four weeks up to the end of the reference week and were available for work in the reference week; or
- were waiting to start a new job within four weeks from the end of the reference week and could have started in the reference week if the job had been available then.

#### Worked

Activity in a job, business or farm, for pay, profit, commission or payment in kind; or any activity in a family business that contributed to the operation of that business although no payment was received. Includes being absent, but on paid leave, from such activity.

#### Worked at some time during the year

People who reported having worked and/or been on paid leave for one week or more during the year.

#### Worked for part of the year

People who reported having worked and/or been on paid leave for part of the year.

### **Abbreviations**

The following abbreviations have been used in this publication

'000 thousand

ABS Australian Bureau of Statistics

ANZSIC Australian and New Zealand Standard Industrial Classification

ASCO Australian Standard Classification of Occupations

LFS Labour Force Survey RSE relative standard error

SACC Standard Australian Classification of Countries

SE standard error

wks weeks

## **Ppoulations and Data Items List (Appendix)**

**APPENDIX 1** POPULATIONS AND DATA ITEMS LIST

#### DATA AVAILABLE ON REQUEST

The ABS has a range of data available on request from the Labour Force Experience

survey. This section lists the data items and populations which relate to the survey. More detailed breakdowns of some data items may also be available on request.

The population(s) for a particular data item refers to the people in the survey to whom the data relates. Where alternative output categories are available for the same data item, these are shown and the data item name is followed by a bracketed numeral (e.g. Country of birth (2)).

For more information about ABS data available on request, contact Linda Fardell on Canberra (02) 6252 6562, or by facsimile on (02) 6252 7512, or by email to <a href="mailto:rinda.fardell@abs.gov.au">rinda.fardell@abs.gov.au</a>.

#### **POPULATION 1**

All persons aged 15-69 years.

#### **POPULATION 2**

Persons aged 15-69 years in the labour force at some time during the year ending February 2005.

#### **POPULATION 3**

Persons aged 15-69 years who worked at some time during the year ending February 2005.

#### **POPULATION 4**

Persons aged 15-69 years who looked for work at some time during the year ending February 2005.

#### **POPULATION 5**

Persons aged 15-69 years who were not in the labour force at some time during the year ending February 2005.

Data items Populations

State or territory of usual residence

Αll

New South Wales

Victoria

Queensland

South Australia

Western Australia

Tasmania

Northern Territory

	Australian Capital Territory	
2	Area of usual residence	All
	Capital city	
	Balance of state/territory	
3	Region of usual residence	All
	Standard labour force dissemination regions	
4	Sex	All
	Males	
	Females	
5	Marital status	All
	Married	
	Not married	- 11
6	Relationship in household	All
	Family member	
	Husband, wife or partner	
	With dependants	
	Without dependants Lone Parent	
	With dependants	
	Without dependants	
	Dependent student	
	Non-dependent child	
	Other family person	
	Non-family member	
	Lone person	
	Not living alone	
	Relationship not determined	A 11
7A	Country of birth and period of arrival	All
	Born in Australia	
	Born overseas Arrived before 1971	
	Arrived 1971-1980	
	Arrived 1971-1980 Arrived 1981-1990	
	Arrived 1991-2000	
	Arrived 2001 to survey date	
	Note: Year of arrival collected in single years	
7B	Country of birth (1)	All
	Born in Australia	
	Born overseas	
	Born in main English-speaking countries	
	Born in other than main English-speaking countries	
7C	Country of birth (2)	All
	Born in Australia	
	Born overseas	
	Oceania and Antarctica	
	North-West Europe Southern and Eastern Europe	
	North Africa and the Middle East	
	South-East Asia	
	North-East Asia	
	Southern and Central Asia	
	Americas	
	Sub-Saharan Africa	
8	Age group (years)	All
	15-19	
	20-24	
	25-34	
	35-44	
	45-54	
	55-59 60.64	
	60-64 65-69	
	Note: Age collected in single years	
9	Labour force status at February 2005	All
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	In the labour force	
	Working	
	Looking for work	
	Not in the labour force	
10	Status in employment at February 2005	All
	Working at February 2005	
	Employee	
	Employer	
	Own account worker	
	Contributing family worker	
	Not working at February 2005	A.II
11	Full-time or part-time status at February 2005	All
	Working at February 2005	
	Full time	
	Part time	
	Not working at February 2005	
12	Industry at February 2005	All
	Working at February 2005	
	Agriculture, forestry and fishing	
	Mining	
	Manufacturing	
	Electricity, gas and water supply Construction	
	Wholesale trade	
	Retail trade	
	Accommodation, cafes and restaurants	
	Transport and storage	
	Communication services	
	Finance and insurance	
	Property and business services	
	Government administration and defence	
	Education	
	Health and community services	
	Cultural and recreational services	
	Personal and other services	
	Not working at February 2005	- ••
13	Occupation at February 2005	All
	Working at February 2005	
	Managers and administrators	
	Professionals	
	Associated professionals	
	Tradespersons and related workers Advanced clerical and service workers	
	Intermediate clerical, sales and service workers Intermediate production and transport workers	
	Elementary clerical, sales and service workers	
	Labourers and related workers	
	Not working at February 2005	
14	Time in the labour force during the year	All
	In the labour force during the year	7 111
	1 to under 4 weeks	
	4 to under 13 weeks	
	13 to under 26 weeks	
	26 to under 39 weeks	
	39 to under 52 weeks	
	52 weeks	
	In the labour force for none of the year	
15	Time worked during the year	All
	Worked at some time during the year	
	1 to under 4 weeks	
	4 to under 13 weeks	
	13 to under 26 weeks	
	26 to under 39 weeks	
	39 to under 52 weeks	
	52 weeks	

	Worked for none of the year	
16	Time not in the labour force during the year  Not in the labour force at some time during the year	All
	1 to under 4 weeks 4 to under 13 weeks	
	13 to under 26 weeks	
	26 to under 39 weeks	
	39 to under 52 weeks	
	52 weeks	
17	In the labour force for the whole year	All
17	Number of employers/businesses during the year None	All
	One	
	Two	
	Three	
	Four or more	
18	Full-time or part-time status of time worked during the year	All
	Worked at some time during the year	
	All full time More full time than part time	
	Full time same as part time	
	More part time than full time	
	All part time	
	Worked for none of the year	
19	Time spent looking for work during the year	All
	Looked for work at some time during the year 1 to under 4 weeks	
	4 to under 13 weeks	
	13 to under 26 weeks	
	26 to under 39 weeks	
	39 to under 52 weeks	
	52 weeks	
20	Did not look for work during the year  Number of spells of looking for work during the year	All
20	None	All
	One	
	Two	
	Three	
	Four or more	
21	Main activity when not in the labour force	All
	Not in the labour force at some time during the year	
	Retired or voluntarily inactive Home duties or child care	
	Attended an educational institution	
	Own illness or injury	
	Own disability or handicap	
	Looking after ill or disabled person	
	Holiday, travel or leisure activities Worked in an unpaid voluntary job	
	Other	
	In the labour force for the whole year	
22	Whether in the labour force at some time during the year	All
	In the labour force at some time during the year	
	For the whole year	
	For part of the year	
23	In the labour force for none of the year	All
23	Whether looked for work at some time during the year  Looked for work at some time during the year	All
	For the whole year	
	For part of the year	
	Did not look for work during the year	
24	Whether worked at some time during the year	All
	Worked at some time during the year	
	For part of the year	
	For part of the year	

Worked for none of the year Αll 25 Time worked part time during the year Worked part time at some time during the year 1 to under 4 weeks 4 to under 13 weeks 13 to under 26 weeks 26 to under 39 weeks 39 to under 52 weeks 52 weeks Did not work part time during the year Time worked full time during the year Αll 26 Worked full time at some time during the year 1 to under 4 weeks 4 to under 13 weeks 13 to under 26 weeks 26 to under 39 weeks 39 to under 52 weeks 52 weeks Did not work full time during the year Whether had an unpaid absence from work during the year Αll 27 Working at February 2005 With current employer for one year or more Had an unpaid absence from work Did not have an unpaid absence from work With current employer for less than one year Had an unpaid absence from work Did not have an unpaid absence from work Not working at February 2005 Time worked with current employer/business ΑII 28 Working at February 2005 Under 1 year Under 3 months 3 to under 6 months 6 to under 9 months 9 to under 12 months 1 to under 2 years 2 to under 3 years 3 to under 5 years 5 to under 10 years 10 years and over 10 to under 20 years 20 years and over Not working at February 2005

## **Supplementary Surveys (Appendix)**

#### **APPENDIX 2 SUPPLEMENTARY SURVEYS**

#### **SUPPLEMENTARY SURVEYS**

The Monthly Population Survey program collects data on particular aspects of the labour force. The following is an historical list of supplementary surveys to the monthly labour force survey. Data from these surveys are available on request and can be obtained by contacting the ABS.

Career Experience, Australia	6254.0 Irregular November 2002
Career Paths of Persons with Trade Qualifications, Australia	6243.0 Discontinued Final issue 1993
Child Care, Australia	4402.0 Irregular June 2002
Education and Work, Australia	6227.0 Annual May 2004
Employee Earnings, Benefits, and Trade Union Membership, Australia	6310.0 Annual August 2004
Forms of Employment, Australia	6359.0 Irregular November 2004
Job Search Experience, Australia	6222.0 Annual July 2004
Labour Force Experience, Australia	6206.0 Biennial February 2005
Labour Force Status and Educational Attainment, Australia	6235.0 Discontinued Final issue 1994
Labour Force Status and Other Characteristics of Families, Australia(a)	6224.0 Discontinued Final issue 2000
Labour Force Status and Other Characteristics of Migrants, Australia	6250.0 Irregular November 2004
Labour Mobility, Australia	6209.0 Biennial February 2004
Locations of Work, Australia	6275.0 Irregular June 2000
Multiple Jobholding, Australia(b)	6216.0 Irregular August 1997
Participation in Education, Australia	6272.0 Discontinued Final issue 1999
Persons Not in the Labour Force, Australia	6220.0 Annual September 2004
Persons Who had Re-entered the Labour Force, Australia	6264.0.40.001 Discontinued Final issue 1995
Persons Who Have Left the Labour Force, Australia	6267.0.40.001 Discontinued Final issue 1994
Retirement and Retirement Intentions, Australia	6238.0 Irregular November 1997
Retrenchment and Redundancy, Australia	6266.0 Irregular July 2001
Successful and Unsuccessful Job Search Experience, Australia	6245.0 Discontinued Final issue 2000
Superannuation, Australia	6319.0 Discontinued Final issue 1995
Underemployed Workers, Australia	6265.0 Annual September 2004
Working Arrangements, Australia	6342.0 Irregular November 2003
Work-Related Injuries, Australia	6324.0 Irregular September 2000

- (a) Latest data available June 2003, from the ABS web site cat. no. 6291.0.55.001 annual, or on request.
- (b) Latest data available on request July 2001.

## **Technical Note**

### TECHNICAL NOTE DATA QUALITY

#### INTRODUCTION

1 Since the estimates in this publication are based on information obtained from occupants of a sample of dwellings, they are subject to sampling variability. That is, they may differ from those estimates that would have been produced if all dwellings had been included in the survey. One measure of the likely difference is given by the standard error (SE), which indicates the extent to which an estimate might have varied by chance because only a sample of dwellings was included. There are about two chances in three (67%) that a sample estimate will differ by less than one SE from the number that would have been obtained if all dwellings had been included, and about 19 chances in 20 (95%) that the difference will be less than two SEs. Another measure of the likely difference is the relative standard error (RSE), which is obtained by expressing the SE as a percentage of the estimate.

**2** Due to space limitations, it is impractical to print the SE of each estimate in the publication. Instead, a table of SEs is provided to enable readers to determine the SE for an estimate from the size of that estimate (see table T1). The SE table is derived from a mathematical model, referred to as the 'SE model', which is created using data from a number of past

Labour Force Surveys. It should be noted that the SE model only gives an approximate value for the SE for any particular estimate, since there is some minor variation between SEs for different estimates of the same size.

#### CALCULATION OF STANDARD ERRORS

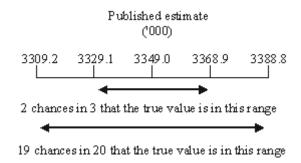
**3** An example of the calculation and the use of SEs in relation to estimates of people is as follows. Table 1 shows that the estimated number of people aged 15-69 years in the labour force for part of the year was 3,349,000. Since this estimate is between 2,000,000 and 5,000,000, table T1 shows that the SE for Australia will lie between 16,050 and 24,600 and can be approximated by interpolation using the following general formula:

SE of estimate
$$= tower SE + \left( \left( \frac{size\ of\ estimate\ - tower\ estimate}{upper\ estimate\ - tower\ estimate} \right) \times (upper\ SE\ - tower\ SE) \right)$$

$$= 16,050 + \left( \left( \frac{3,349,000-2,000,000}{5,000,000-2,000,000} \right) \times (24,600-16,050) \right)$$

$$= 19,900 \ (rounded to\ the\ ne\ arest\ 100)$$

4 Therefore, there are about two chances in three that the value that would have been produced if all dwellings had been included in the survey will fall within the range 3,329,100 to 3,368,900 and about 19 chances in 20 that the value will fall within the range 3,309,200 to 3,388,800. This example is illustrated in the diagram below.



**5** In general, the size of the SE increases as the size of the estimate increases. Conversely, the RSE decreases as the size of the estimate increases. Very small estimates are thus subject to such high RSEs that their value for most practical purposes is unreliable. In the tables in this publication, only estimates with RSEs of 25% or less are considered reliable for most purposes. Estimates with RSEs greater than 25% but less than or equal to 50% are preceded by an asterisk (e.g. \*3.4) to indicate they are subject to high SEs and should be used with caution. Estimates with RSEs of greater than 50%, preceded by a double asterisk (e.g. \*\*0.3), are considered too unreliable for general use and should only be used to aggregate with other estimates to provide derived estimates with RSEs of 25% or less.

#### **MEANS AND MEDIANS**

**6** The RSEs of estimates of mean and median duration of time spent looking for work are obtained by first finding the RSE of the estimate of the total number of people contributing to

the estimate (see table T1) and then multiplying the resulting number by the following factors:

- mean duration of time spent looking for work: 0.76
- median duration of time spent looking for work: 1.63

7 The following is an example of the calculation of SEs where the use of a factor is required. Table 10 shows that the estimated number of males aged 15-69 years looking for work at some time during the year was 782,000 with a median duration of time spent looking for work of 12 weeks. The SE of 782,000 can be calculated from table T1 (by interpolation) as 10,900. To convert this to an RSE we express the SE as a percentage of the estimate, or 10,900/782,000 = 1.4%.

**8** The RSE of the estimate of median duration of time spent looking for work for males aged 15-69 years is calculated by multiplying this number (1.4%) by the appropriate factor shown in the previous paragraph (in this case 1.63): 1.4 x 1.63 = 2.3%. The approximate SE of this estimate of median duration of time spent looking for work for males aged 15-69 years is therefore 2.3% of 12 weeks, i.e. about 0.3 weeks. Therefore, there are two chances in three that the median duration of time spent looking for work for males aged 15-69 years that would have been obtained if all dwellings had been included in the survey would have been within the range 11.7 weeks to 12.3 weeks, and about 19 chances in 20 that it would have been within the range 11.4 weeks to 12.6 weeks.

**9** Estimates of means and medians produced from population estimates smaller than the values provided in table T2 have RSEs larger than 25% and should be used with caution. Table T2 also indicates the size of population estimates that would produce means and medians with RSEs greater than 50%, which are considered too unreliable for general use.

#### PROPORTIONS AND PERCENTAGES

**10** Proportions and percentages formed from the ratio of two estimates are also subject to sampling errors. The size of the error depends on the accuracy of both the numerator and the denominator. A formula to approximate the RSE of a proportion is given below. This formula is only valid when x is a subset of y.

$$RSE\left(\frac{x}{y}\right) = \sqrt{\left[RSE(x)\right]^2 - \left[RSE(y)\right]^2}$$

**11** Considering the example above, of the 3,349,000 people aged 15-69 years in the labour force for part of the year, 461,500, or 13.8%, looked for work at some time during the year. The SE of 461,500 may be calculated by interpolation as 9,000. To convert this to an RSE we express the SE as a percentage of the estimate, or 9,000/461,500 = 2.0%. The SE for 3,349,000 was calculated previously as 19,900, which converted to an RSE is 19,900/3,349,000 = 0.6%. Applying the above formula, the RSE of the proportion is:

$$RSE = \sqrt{(2.0)^2 - (0.6)^2} = 1.9\%$$

12 Therefore, the SE for the proportion of people aged 15-69 years who looked for work at

some time during the year is 0.3 percentage points (=(13.8/100)x1.9). Therefore, there are about two chances in three that the proportion of people aged 15-69 years who looked for work at some time during the year is between 13.5% and 14.1%, and 19 chances in 20 that the proportion is within the range 13.2% to 14.4%.

#### **DIFFERENCES**

**13** Published estimates may also be used to calculate the difference between two survey estimates (of numbers or percentages). Such an estimate is subject to sampling error. The sampling error of the difference between two estimates depends on their SEs and the relationship (correlation) between them. An approximate SE of the difference between two estimates (x-y) may be calculated by the following formula:

$$SE(x-y) = \sqrt{[SE(x)]^2 + [SE(y)]^2}$$

**14** While this formula will only be exact for differences between separate and uncorrelated characteristics or subpopulations, it is expected to provide a good approximation for all differences likely to be of interest in this publication.

#### STANDARD ERRORS

#### T1 STANDARD ERRORS OF ESTIMATES

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT		RSE
Size of estimate (persons)	no.	no.	no.	no.	no.	no.	no.	no.	no.	<u></u>
100	100	110	190	170	160	110	110	140	80	80.0
200	170	180	270	220	230	150	150	170	140	70.0
300	230	240	330	270	280	180	180	190	200	66.7
500	340	340	420	330	350	220	220	230	290	58.0
700	430	420	490	380	410	250	250	250	370	52.9
1000	550	530	580	440	480	290	290	280	470	47.0
1500	720	670	690	520	570	340	340	330	610	40.7
2000	860	790	790	590	650	380	380	360	730	36.5
2500	1,000	900	850	650	700	400	400	400	850	34.0
3000	1,100	1,000	950	700	750	450	450	400	950	31.7
3500	1,200	1,050	1,000	750	800	500	450	450	1,050	30.0
4000	1,300	1,150	1,100	800	850	500	500	450	1,100	27.5
5000	1,450	1,250	1,200	850	950	550	550	500	1,250	25.0
7000	1,700	1,500	1,400	1,000	1,100	650	600	600	1,550	22.1
10000	2,050	1,750	1,600	1,150	1,250	700	700	650	1,850	18.5
15000	2,450	2,100	1,900	1,350	1,500	850	800	800	2,250	15.0
20000	2,800	2,350	2,200	1,500	1,650	950	900	900	2,600	13.0
30000	3,300	2,750	2,600	1,800	1,950	1,100	1,050	1,050	3,150	10.5
40000	3,650	3,100	2,900	2,000	2,200	1,250	1,150	1,150	3,550	8.9
50000	3,950	3,300	3,200	2,200	2,350	1,350	1,250	1,300	3,900	7.8
100000	4,950	4,200	4,250	2,900	3,050	1,750	1,600	1,750	5,100	5.1
150000	5,600	4,850	5,050	3,400	3,500	2,000	1,850	2,100	5,900	3.9
200000	6,150	5,450	5,650	3,800	3,900	2,250		2,400	6,550	3.3
300000	7,200	6,450	6,650	4,450	4,450	2,600		2,850	7,650	2.6
500000	8,900	8,100	8,150	5,450	5,300	3,100			9,300	1.9
1000000	12,450	11,350	10,700	7,150	6,600				12,150	1.2
2000000	18,300	16,450	13,950	9,350	8,150				16,050	8.0
5000000	32,850	28,350	19,650						24,600	0.5

10000000 ... .. .. .. .. .. .. .. .. .. 43,150 0.4

. . not applicable

# T2 LEVELS AT WHICH ESTIMATES HAVE RELATIVE STANDARD ERRORS OF 25% AND 50%(a)

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
	no.	no.	no.	no.	no.	no.	no.	no.	no.
	25	% RSE							
Mean duration of time spent looking for work	3,900	3,100	2,900	1,500	2,300	700	900	600	2,700
Median duration of time spent looking for work	17,100	12,900	10,900	6,100	7,300	2,900	2,800	2,600	14,500
All other estimates	6,800	5,200	4,600	2,600	3,200	1,300	1,300	1,200	5,100
	50	% RSE							
Mean duration of time spent looking for work	600	600	800	500	700	200	300	200	300
Median duration of time spent looking for work	4,400	3,400	3,200	1,900	2,200	900	900	900	3,200
All other estimates	1,300	1,100	1,300	800	900	400	400	400	800

<sup>(</sup>a) Refers to the number of persons contributing to the estimate.

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